

ABSTRACT OF THE DISCLOSURE

A magnetic resonance imaging (MRI) system is provided to obtain an MR image of an object to be imaged. The system comprises an element for detecting an ECG signal the object and an element for performing a pulse sequence toward the object. A unit of imaging defined by the pulse sequence is longer in temporal length than one heart beat represented by the ECG signal. The system further comprises an element for acquiring an MR signal from the object in response to performance of the pulse sequence and an element for producing the MR image based on the acquired MR signal. Further disclosed are to apply a plurality of divided MT pulses instead of the conventional single MT pulse, to use an SE-system pulse sequence having a shorter echo train spacing, to generate sounds by applying gradient pulses incorporated in an imaging pulse sequence so as to automatically instruct a patient to perform an intermittent breath hold during three-dimensional scanning.